

ABSTRACT

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Title of Diploma Thesis: HPLC analysis of drugs

The diploma thesis deals with the development and optimization of HPLC method for simultaneous determination of selected polyphenolic compounds: apigenin, acteoside and luteolin.

During the experiments, the most suitable conditions for separation were sought, various mobile phases and various types of gradient elution were tested. The Zorbax Eclipse XBD C18 column 250 x 4.6 mm; 5 µm was used for analysis. The detection was performed with diode array detector at wavelengths 249 nm and 350 nm, the column was thermostated at 30 °C. The injected volume was 10 µl. The best results were achieved using mobile phase consisting of acetonitrile and aqueous solution of formic acid (0.03 mol/l) at a flow rate 1ml/min.